

Amendments to the Specification

Please amend the paragraph at page 1, lines 16-24 in the following manner:

Along with the drastic advancement in radio communications technology, articles and products making use of wireless technologies have ~~been popularized~~ become popular, and great expansion of radio channel capacity is now expected. Especially, many studies have been made to increase the transmission capacity of a radio path by carrying out signal multiplexing over multiple dimensions, including time, space, polarized wave, and code.

Please amend the paragraph bridging pages 4 and 5 in the following manner:

FIG. 1B illustrates another example of ~~the~~ a conventional variable-directivity antenna, as disclosed in JPA 10-154911, which is capable of electrically switching the directivity. The antenna device disclosed in this publication has a center radiation element 612 placed at the center of a round-shaped outer conductor 610 and a plurality of parasitic elements 614 surrounding the center radiation element 612. At the bottom of each parasitic element 614 is provided impedance load 616 for switching the impedance between high and low. The directivity of the antenna is changed by switching the impedance level of the impedance loads 616. The distance between the center radiation element 612 and the parasitic element 614 is about a quarter wavelength ($\lambda/4$), and therefore, the antenna size becomes greater than about 1.6λ .

Please amend the paragraph at page 5, lines 13-24 in the following manner:

FIG. 1C illustrates still another example of ~~the~~ a conventional variable-directivity antenna, which is disclosed in JPA 2001-24431. The variable-directivity antenna disclosed in this publication has an antenna element A0, to which a radio signal is fed, and variable reactance elements A1-A6 surrounding the antenna element A0, to which radio signal are not fed. These antenna elements A0-A6 are arranged on a round-shaped outer conductor 700. The distance "d" between the antenna element A0 and the variable reactance elements is about $\lambda/4$, and the size of the entire antenna device becomes about λ .